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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,335	01/23/2002	Kirk D. Pospesel	POU920000180US1	8018

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FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI
& BIANCO P.L.
ONE BOCA COMMERCE CENTER
551 NORTHWEST 77TH STREET, SUITE 111
BOCA RATON, FL 33487

EXAMINER

SERRAO, RANODHI N

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,335

Applicant(s)

POSPESEL ET AL.

Examiner

Ranodhi Serrao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 12, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai et al. (6,005,869).

As per claim 1, Sakai et al. teaches a method for simultaneous communication over a bus coupling at least one master agent with at least one slave agent, the method on a master agent having an input and an output to the bus (column 11, line 66-column 12, line 15), comprising the steps of: determining if there is data from the master, and if there is data from the master (column 15, lines 18-25) then performing the sub-steps of: testing if the data from the bus is a token (column 15, lines 26-37); if the data from the bus is a token, then moving the data from the master to the bus and discarding the token from the bus (column 17, lines 30-38); and if the data is not a token from the bus, then moving the data from the input of the bus to the output of the bus (column 13, lines 19-36); wherein if the data is not from the master and the data is from the bus, then moving the data from the input of the bus to the output of the bus (column 13, line 47-column 14, line 6).

As per claim 2, Sakai et al. teaches determining if there is data from the bus or if there is data from the master (column 17, lines 51-64).

As per claim 3, Sakai et al. teaches determining if there is no data on the output or if an advance line is asserted and if there is no data on the output or an advance line is asserted then performing the step of determining if there is data from the bus or if there is data from the master (column 13, line 47-column 14, line 6: wherein dummy ID information serves the function of an advance line).

As per claim 4, Sakai et al. teaches determining if the master agent is coupled to an access macro and if the master agent is coupled to an access macro, then when the bus is initialized performing the step of placing tokens on the bus, where the maximum number of tokens on the bus is set equal to a total number of master agents plus the total number of slave agents less one (column 20, lines 35-39 and column 26, lines 12-42: wherein token packet management table serves the function of an access macro).

As per claim 5, Sakai et al. teaches a method for simultaneous communication over a bus which couples at least one master agent with at least one slave agent, the method on a slave agent having an input and an output to the bus comprising the steps of: determining if there is data from the bus or from the slave and if there is data from the bus but not from the slave then moving the data from the bus to the output and if there is data from the slave but not the bus then moving the data from the slave to the output (column 13, line 47-column 14, line 6); determining if there is data both from the bus and the slave and if there is data from both the bus and the slave then performing the sub-steps of (column 28, lines 14-32): if the bus has priority then moving the data from the bus to the output and setting the priority to the slave (column 28, lines 33-56);

and if the bus does not have priority then moving the data from the slave to the output and setting the priority to the bus (column 28, lines 33-56).

As per claim 6, Sakai et al. teaches determining if there is data from the bus or if there is data from the slave (column 17, lines 51-64).

As per claim 7, Sakai et al. teaches determining if there is no data on output or if an advance line is asserted and if there is no data on output or an advance line is asserted then performing the step of determining if there is data from the bus or if there is data from the slave (column 13, line 47-column 14, line 6: wherein dummy ID information serves the function of an advance line).

As per claim 8, Sakai et al. teaches a method for simultaneous communication over a bus coupling at least one master agent with at least one slave agent, the method on a master agent having an input and an output to the bus comprising the steps of: receiving a reset command (column 12, line 65-column 13, line 7); determining after being reset if the master agent is coupled to an access macro and if the master agent is coupled to the access macro then placing $n-1$ tokens on the bus, where n is the total number of master agents and slave agents communicating on the bus (column 26, lines 12-42).

As per claim 9, Sakai et al. teaches a data communications network for simultaneous communications between two or more agents comprising: at least one agent designated as a slave agent coupled to a communications bus; at least one agent designated as a master agent coupled to the communications bus; an interface to the master agent with an input from the bus and an output to the bus, the interface

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comprising a plurality of latches for testing if there is data, and if there is data from the master then testing if the data from the bus is a token; if the data from the bus is a token, then moving the data from the master to the bus and discarding the token; and if the data is not a token from the bus, then moving the data from the input of the bus to the output of the bus; wherein if the data is not from the master and the data is from the bus, then moving the data from the input of the bus to the output of the bus.

As per claim 10 Sakai et al. teaches an interface on each slave agent with an input to the bus and an output to the bus (column 24, lines 13-29), the interface comprising a plurality of latches for testing if there is data from the bus or from the slave agent and if there is data from the bus but not from the slave then moving the data from the bus to the output and if there is data from the slave but not from the bus then moving the data from the slave to the output (column 24, lines 13-29: wherein the switch serves the function of a latch); wherein the plurality of latches tests if there is data both from the bus and data from the slave and if there is data from both the bus and from the slave then testing if the bus has priority and (column 4, lines 3-12): if the bus has priority then moving the data from the bus to the output and setting the priority to the slave; and if the bus does not have priority then moving the data from the slave to the output and setting the priority to the bus (column 28, lines 33-56).

As per claim 12, Sakai et al. teaches wherein at least one of the communication agents is coupled to a first brand of computer and at least one of the communications agents is coupled to a second brand of computer so as to form a heterogeneous environment (column 2, lines 11-26).

As per claim 14, Sakai et al. teaches wherein the slave agent includes: an interface with an input from the bus and an output to the bus (column 24, lines 13-29), the interface comprising a plurality of latches for testing if the data is for the slave agent and if the data is for the slave agent then transferring the data to the slave (column 24, lines 13-29: wherein the switch serves the function of a latch).

As per claim 15, Sakai et al. teaches wherein the interface to the master agent further comprises a plurality of latches for testing if the data is for the master agent and if the data is for the master agent, then passing the data to the master (column 13, lines 19-36: wherein the switch serves the function of a latch).

As per claim 16, Sakai et al. teaches a computer readable medium containing programming instructions for simultaneous communication over a bus coupling at least one master agent with at least one slave agent, the method on a master agent having an input and an output to the bus, the programming instructions comprising: receiving a reset command (column 12, line 65-column 13, line 7); determining after being reset if the master agent is coupled to an access macro and if the master agent is coupled to the access macro then placing $n-1$ tokens on the bus, where n is the total number of master agent agents and slave agents communication on the bus (column 26, line 12-42).

As per claim 17, Sakai et al. teaches a computer readable medium containing programming instructions for simultaneous communication over a bus coupling at least one master agent with at least one slave agent, the method on a master agent having an input and an output to the bus, the programming instructions comprising (column 11,

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line 66-column 12, line 15): determining if there is data from the master, and if there is data from the master then performing the programming instructions of (column 15, lines 18-25): testing if the data from the input is a token (column 15, lines 26-37); if the data from the bus is a token, then moving the data from the master to the bus and discarding the token (column 17, lines 30-38); and if the data from the bus is not a token, then moving the data from the input of the bus to the output of the bus (column 13, lines 19-36); wherein if the data is not from the master and the data is from the bus, then moving the data from the input of the bus to the output of the bus (column 13, line 47-column 14, line 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (6,005,869) as applied to claims 9 and 10 above, and further in view of Stallmo et al. (5,689,678).

As per claim 11, Sakai et al. teaches the limitations mentioned above in claims 9 and 10 but fail to teach wherein the data further includes control, data and parity data. Stallmo et al. teaches wherein the data further includes control, data and parity data (column 15, lines 42-53 and column 16, lines 1-15). It would have been obvious to one

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having ordinary skill in the art at the time of the invention to add wherein the data further includes control, data and parity data in order to identify and reconstruct logical blocks of data.

As per claim 13, Sakai et al. teaches the limitations mentioned above in claims 9 and 10 but fail to teach wherein the bus is selected from a group of buses consisting of wire, wireless and infrared. Stallmo et al. teaches wherein the bus is selected from a group of buses consisting of wire, wireless and infrared (column 21, line 63-column 22, line 15). It would have been obvious to one having ordinary skill in the art at the time of the invention to add wherein the bus is selected from a group of buses consisting of wire, wireless and infrared in order to allow any communications protocol or bus structure to interface the MCUs to the host computer, to the data storage devices, and to each other.

Conclusion

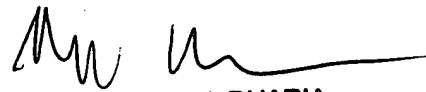
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iitsuka (5,444,847) teaches a data transfer method for transferring a data frame among a plurality of devices connected to a serial data bus. Wise et al. (5,805,914) teaches a data pipeline system and data encoding method. Mizuguchi et al. (6,310,885) teaches a network system. Robins (5,457,683) teaches a link and discovery protocols for a ring interconnect architecture.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-5:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SUPERVISORY PATENT EXAMINER